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Page 104, 7, 080959 09/680959 9-7-10 125

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OM nucleic - nucleic search, using sw model

Run on:

December 1, 2002, 14:43:43 ; Search time 2658 Seconds (without alignments) 4532.943 Million cell updates/sec

US-09-680-959-125 414 1 ctaacgtacagaacagcttg.....gttnggaaagcttgaccagt 414

Title: Perfect score: Sequence:

IDENTITY_NUC Gapext 1.0 Scoring table:

2054640 segs, 14551402878 residues : pe

4109280 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

GenEmbl:*

1: 9b_ba:*

2: 9b htg:*

3: 9b_li:*

9b_om:*

9b_pat:*

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gb_sts:*gb_sy:*gb_un:*gb_vi:*em_ba:*em_fun:*em_fun:*

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em_htgo_other:*

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ALIGNMENTS

ROD 29-MAY-1998

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MMY15742 2192 bp mRNA lin Mus musculus mRNA for dystrobrevin B, partial. Y15742 Y15742.1 GI:3127923 dystrobrevin B. RESULT 1
MMY15742
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM

Mus musculus.
Mus musculus.
Mus musculus.
Mus musculus subservations (Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae, Mus.
1 (bases 1 to 2192)
Puras, A.A.
Puras, A.A.
Direct Submission
Submitted (28-NOV-1997) A.A. Puca, T.I.G.E.M, Via Olgettina 58,

REFERENCE AUTHORS. TITLE JOURNAL

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/translation="VKLTIKGNKLAAAGEPROGPSAPAGKRARMIEEGGNKKKTWAE
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STELEVSKLEVISSLYYQLNKRLPSTHOJCNSCSISLLLNFWVAADSEGRGKKLTVF
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YTEHAVRTCFPQOKKILMLINTYTFSONSDSNGLAMFGKLOOFIKEALKLFTAVFEGFSFG
YTEHAVRTCFPQOKKILMLINTYTFSONSONGLAMFGKLOOFIKEALKLFTAVFEGFSFG
YGCVPSREPPHPVFPEQPEKPLDLAHLYPPPPLTNNNDTVVSHMSGVPTPKRLO
YSOLMYNLLAADEHALIASYVARLOHOTRVLDSPSRLOBEHKLIARYARAFAABAGNMT
RPTDASFNFDASFNFDANGOROLIAELENKNREILOETORLEEHROASOPTFEKAONPML
LABEKLLRORKDELEDRMSALOESRRELMVOLEGLMKILKAOATGSPHTSPTHGGRP
MPMPVRSTSAGSTPTHGPODSLSGVGDVOBFAGTRRILLAROASSTTNTMSS
LVKELHSGABEREQAGTERTREGLPPBAHSCPSFCCTPGPSLOAARLYOPPERGARPM
GSGEGLPEAAAGGPPACTSIRIPPSWHGLISASGIYQEMKRKALKK"
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ONS Puca. A. N. Nigrov. Piluso, G., Belsito, A., Sampaolo, S., ONS Puca. A. N. Nigrov. Piluso, G., Belsito, A., Sampaolo, S., Quaderi, N., Rossi, E., Di Iorio, G., Ballabio, A. and Franco, B. Identification and characterization of a novel member of the dystrobrevin gene family FEBS Lett. 425 (1), 7-13 (1998)

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Protein_id="CAR5752.1"
/db_xref="GI:3127924"
/db_xref-"SPTREMBL:070585"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissaue Procurement: Jeffrey E. Green, M.D.
Tissaue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford university School of Medicine, Stanford, CA 94305
Wheb site: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
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                                                                                                                                                                                                                                                                                                                     Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (03-UNN-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           292 AACGTACAGAACAGCTTGCAAGTTA-CGATTTGTACAGAAGCGATGCAACCTTCATCTTG 350
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/db_xref="G1:21410284"
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0; Mismatches 4;
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194. .2002
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/db_xref="taxon:10090"
/map="FVB/N"
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Mammalia, Eutheria, Rodentia,
1 (bases 1 to 2329)
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Homo sapiens, Similar to dystrobrevin, beta, clone MGC:17163
IMAGE:3868207, mRNA, complete cds.
BC016655.1 GI:16741717
MGC.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2221)
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Submitted (31-OCT-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Dive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                   GCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTG 182
                                                                                                                                                                                                                                                                            344 GCACGGAGATCA-GCGTGTCCCGCCTGGAGCCGTCATCTCGTCCATCTACTATCAGTTG 402
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                                                                                                                                                 TTGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
                                                               3 AACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTG 62
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                      5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCAGATGTCAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT 414
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Contact: villalon@bcm.tmc.edu.
Villalon, D.K., Luna, R.A., Hale, S.M., Hulyk, S., I
A.M., Holloway, M., Telford, B, Hodgson, A., Bouck,
Muzny, D.M., Gibbs, R.A.
                      Indels
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Pred. No. 3.6e-110;
0; Mismatches 4;
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
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  98.5%;
  al Similarity 98.5
406; Conservative
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SVEGSISLLINEWVAAYDSEGRGKLIVPSVEAMLATMCGGKMLDKLRYIFSOMSDSNG
LIMMFGKLLOFFIKEALDTAVFEGFSFGYTEHAVRTOCFPQOKKIMLDNFLDTWIANDED
POCLVWILDFLAHTRLAHVENVFHPVESSYCHCESMAGFRYRCOCHNYOLCONCFWRGHA
SGRAFSOMGAKEHSSWENSSYSPAKLSHAHISTSSLGCCYPSREPPHYPFEQFREYPLLINHUNDTWYAHUSGYPPTRILQYSQUMPULLABEHALIASYVARLOHTRYI
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QLEGLMKLLKEEEGXQAAQATGSPHTSPTHGGGRPMPMPVRSTSAGSTPTHGPQDSLS
GVGGDVQEAFAQGTRRNLRNDLLVAADSITNTMSSLVKELHSGEVTPVS"
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Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 2428)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
Submitted (14-NOV-1997) Blake D., Department of Biochemistry,
Genetics Unit, University of Oxford, South Parks Road, Oxford,
Oxon. OXI 3QU, UNITED KINGDOM
2 (Dases 1 to 2428)
Blake,D.J., Nawrotzki,R., Loh,N.Y., Gorecki,D.C. and Davies,K.E.
beta-dystrobrevin, a member of the dystrophin-related protein
469
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/product="beta-dystrobrevin"
/protein_id="CAA05796.1"
/db_xref="GI:2980673"
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beta-dystrobrevin.
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Query Match

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/product="similar to dystrobrevin, beta"
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/product="similar to dystrobrevin, beta"
/protein_id="AAH16655.1"
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2244)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 AACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243 AATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9; Length 2221;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCCAGATGTCAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT 414
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2244 bp mRNA 1:
Homo sapiens mRNA for dystrobrevin B DIN-B1.
Y15722
                                                                 /clone="MGC:17163 IMAGE:3868207"
/tissue_type="Eye, retinoblastoma"
/clone_lib="NIH_MGC_67"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 318.4; DB 9
Pred. No. 2.1e-89;
0; Mismatches 45
                                                                                                                                                           /note="Vector: pcMV-SPORT6"
157. 1839
/codon_start=1
                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           593 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                m
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Best Local Similarity 88.6%;
Matches 365; Conservative (
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DTN-B1; dystrobrevin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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/ OD_XTE_T= STATE ALL (0.00941"  
/ OD_XTE_T= STATE ALL (0.00941"  
/ CLEAN STATE ALL (0.00941"  
/ OR KROLLHUYDIWHAR ALL (0.00941"  
/ OR STATE ALL (0.00941"  
/ OR STATE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     456
Dured, Submission Submission Submitted (25-NOV-1997) A.A. Puca, T.I.G.E.M, Via Olgettina 58, 20132 Milano, ITAL Related sequence Y12712.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 IIGAIAICIGGAAIAIGAICGAAGCITICCGAGACAAIGGCCTIAACACGCTGGACCACA 122
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Pred. No. 2.2e-89;
0; Mismatches 45;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type~"skeletal muscle"
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/protein_id="CAA75737.1"
/db_xref="GI:3127913"
                                                                                                                                                                                                                                                                                 1. .2244
/organism="Homo sapiens"
/db_xref="taxon:9606"
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Query Match
Best Local Simil
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product-"dystrobrevin B"
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/product-"dystrobrevin B"
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/db_xref-"577765237"
/db_xref-"SPTREMBL:043782"
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LMTESKFDÖFLKEVLKLPTAVFEGPSFGYTBHSVRTCPPQQRKIDKLRYVFSQNSDSNG
LMTESKFDÖFLKEVLKLPTAVFEGPSFGYTBHSVRTCPPQQRKIDKLRYVFSQNSDSNG
LMTESKFDÖFLKEVLKLPTAVFEGPSFGYTBHSVRTCPPQQRKIDKLRYVFSQNSDSNG
LMTESKFDÖFLKEVARNSFRKLSHAISKSIGCVPTREPPHPVFPEQPERCHDLAHIV
PPRPLTMMUTWASHWSSGVPTPTKSYLDSFSRLGCVPTREPHPVFPEQPERCHDLAHIV
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PTDLSFFPDANKQQRQLIABLERNKRFILGETORTRLEHEQASOPTPEKAGONPTLLA
ELRLLRQRKDELEGPRASALGCSFRELWVQLEELMKLLKEEEGKQAQATGSPFHTSPTH
GGGRRPMPMFVRSTSAGSTPTHCPQDSLSGVGGADEGGREEEEEKMQNGKDR
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                                 PRI 29-MAY-1998
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                                                                                                                                       Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                              Direct Submission
Submitted (22-APR-1997) A.A. Puca, Seconda Universita di Napoli,
Istituto di Patologia Generale, Larghetto S.Aniello a Caponapoli
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2 (bases 1 to 2247)

Puca'A.A., Nigro,V., Piluso,G., Belsito,A., Sampaolo,S.,

Quaderi,N., Rossi,E., Di Iorio,G., Ballabio,A. and Franco,B.

Identification and characterization of a novel member of the dystrobrevin gene family

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                                       Homo sapiens mRNA for brain dystrobrevin B. v12712
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                                 mRNA
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Pred. No. 2.2e-89;
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                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="2"
                                 2247 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="brain"
/dev_stage="adult"
184. .1887
                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
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88.6%;
                                                                                                                                     Eukaryota; Metazoa; C
Mammalia; Eutheria; F
1 (bases 1 to 2247)
                                                                          X12712.1 GI:2765226
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                                                                                          dystrobrevin B.
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Homo sapiens
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Best Local Similarity
Matches 365; Conserv
                                 HSDYSTRAO
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VERSION
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RESULT 6
HSDYSTRAO
                                                                                                                     ORGANISM
                                                                                                                                                                  REFERENCE
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SVEQSISLLINFMIAAYDSEGRGKLTVFSVRAMLATMCGGRMLDKLRYVFSQMSDSNG
LMIFSKREQDEKKEVLKLPTAYBEGPSFGYTERBYSVRTCPRQDKTKTMLMPLDTMMADDP
POCLVWLPLMHRLAHVENVENVFHPVEGSYCRCESMMGFRYRCQOCHNYOLCONCYMRGHA
GGPHSNQHQMKEHSSWKSPAKKLSHAISKSLGCVPTREPPHPVFPEQPERPLDHIY
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DSPSRLDEEHRLIARYAARLAAEAGNVTRPPTDLSFNFDANKQQRQLIAELENKNREI
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GVGGDVQEAFAQGTRRNLRNDLLVAADSITNTMSSLVKELHSAEBGAEEBEEKMQNGK
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okrcnlhlvdiwnmieafrdnglntldhtteisvsrletvissiyyolnkrlpsthqi
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2407)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished
2 (bases 1 to 2407)
2 (bases 1 to 2407)
Adams, M.E., Jackson, K., Sadoulet-Puccio, H.M., Kunkel, L.M.,
Adams, M.E. and Froehner, S.C.
Direct Submission
Submitted (03-SEP-1997) Physiology, UNC-CH, Rm 285 MSRB CB#
Chapel Hill, NC 27599, USA
AATTTCATGGTCGCCCCTACGACAGTGAGGCCCGAGGCANGTTGACCGTGTTTTCAGNT
                    303 AAAGCTATGTTAGCAACCATGTGTGGGAAAAATGCTGGACAAATTGAGATACATTTTC
                                                                                                                   AF022728 2407 bp mRNA linear PRI 06
Homo sapiens beta-dystrobrevin (BDTN) mRNA, complete cds
AF022728
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Pred. No. 2.2e-89;
0; Mismatches 45
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/protein_id-"AAC05082.1"
/db_xref="GI:2935183"
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/organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="2"
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162. .2045
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/gene="BDTN"
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kkroklilvotwamerafrendklintpurptersykrletytsstykolmkrepsthgi
sveosisllinmiaarydsegrklyvfsykamlameggkmidklryvfsobsdsn
imiferfodfikkliptafyfegfsfsytkensyktefoqokkiimmidthumadpp
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 2573)
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Submitted (25-NOV-1997) A.A. Puca, T.I.G.E.M, Via Olgettina 58,
20132 Milano, ITALY .
Related sequence Y12712.
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                                                                                                                                                                                                                                                                                                        617
                                                                                                                     437
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                                          379 CCACCGAGATCA-GTGTGCCGCCTCGAAACTGTCATCTCCTCCATCTACTATCAGTTG
                                                                                                                                                     AACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTTCCTACTC
                                                                                                                                                                      260 AACTTACAGAACAGCCTGCAAATTA-CGATTTGTACAAAAACGATGCAACCTTCATCTTG
                                                                                        GCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTG
                              63 TIGATATCIGGAATAIGAICGAAGCITICCGAGACAAIGGCCITAACACGCIGGACCACA
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                                                                                                                                                                                                                                                                                                                                                     linear
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Homo sapiens mRNA for dystrobrevin B DTN-B2.
115718
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/protein_id="CAA75733.1"
/db_xref="GI:3133087"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /map="p23"
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1...1677
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/organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="2"
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FEBS Lett. 425 (1), 7-13 (1998)
98200066
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DTN-B2; dystrobrevin B
Homo sapiens.
Homo sapiens
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Puca, A.A.
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AUTHORS
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FEATURES
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AKO94494 110-JUL-2002 DP MRNA linear PRI 15-JUL-2002 HOMO sapiens CDNA FLJ37175 fis, clone BRACE2028410, highly similar to Homo sapiens beta-dystrobrevin (BDIN) MRNA.
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Direct Submission
Submitted (04-JUL-2002) Takao Isogai, FLJ Project(HRI Team); 2-6-7
Kazusas-Kamatari, Kisarazu, Chiba 292-0812, Japan
Kazusas-Kamatari, Kisarazu, Chiba 292-0812, Japan
Kemali:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)
NEDO human cDNA sequencing project supported by Ministry of
Economy, Trade and Industry of Japan; cDNA full insert sequencing:
PQCLVWLPLWHRLAHVENVEHPVECSYCRCESMMGFRYRCQOCHNYQLCQNCFWRGHA
GGPHSNQHQMKEHSSWKSPAKKLSHAISKSLGCVPTREPPHPVFPEQPEKPLDLAHIV
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DSPSRLDEBEHRIJARYAARAAEAGNVTRPPTDLSFNFDANKQQRQLIAELENKNREI
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QLEELMKLLKEEEQKQAVSELRNFPPDSRSFARSSFPHINVSPLLPAHHL"

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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
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Homo sapiens cerebellum cDNA to mRNA, clone_lib:BRACE2
clone:BRACE2028410.
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llarity 88.6%;
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hes 213;
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 Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and RAB; annotation: HRI and RAB.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
1 (bases 1 to 380)
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Submitted (05-NUG-1998) Loh N.Y., Genetics Unit, Department of
Blochemistry, University of Oxford, South Parks Road, Oxford, OXI
                                                                                                                                                                                                                                                                                                             TTGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
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Nawrotzki, R.A., Blake, D.J. and Davies, K.E.
Genomic organization and refined mapping of the mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363 TCCCAGATGTCAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT 414
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                                                                                                                   /db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="BRACE2028410"
/clone_lb="BRACE2"
/note="cloning vector: pME18SFL3"
1 a 597 c 610 g 432 t
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Pred. No. 6.9e-89;
0; Mismatches 46
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Mamm. Genome 9 (11), 857-862 (1998)
                                                                                                             /organism="Homo sapiens"
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beta-dystrobrevin; dtn-b gene.
                                                                                  Location/Qualifiers
1. .2200
Research Association for
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Local Similarity 88.3%;
Thes 364; Conservative (
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Elasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoldea;
Torpediniformes; Torpedinoidei; Torpedinidae; Torpedo.
1 (bases 1 to 4615)
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Torpedo californica (library: lamda gtil) adult electric organ cDNA
                                                                                                                                                                                                                                                                                                                                                                                     54 TICATCTTGTTGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGC 113
                                                                                                                                                                                                                                                                                                                                                                                                            114 TGGACCACAGCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTAC 173
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Wagner, K.R., Cohen, J.B. and Huganir, R.L.
The 87K postsynaptic membrane protein from Torpedo is a protein-tyrosime kinase substrate homologous to dystrophin Neuron 10 (3), 511-522 (1993)
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                                                                                                                                                                                                                                                                                                          Score 202; DB 10;
Pred. No. 1.2e-52;
0; Mismatches 1;
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Pred. No. 1.8e-48;
0; Mismatches 125;
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/organism="Torpedo californica"
/db_xref="taxon:7787"
/tissue_type="electric organ"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /usedin=AJ010204:dtn_CDS
/usedin=AJ010202:dtn_mRNA_A
/usedin=AJ010203:dtn_mRNA_B
i 109 c 70 g 117 t
1. .380
/organism="Mus musculus"
/db_xref="taxon:10090"
84. .297
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836 c 893 g 1379
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99.1%; Pre
tive 0;
                                                                                                  /gene="dtn-b"
84. .297
                                                                                                                       84. .297
/gene="dtn-b"
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Best Local Similarity 69.1
Matches 284; Conservative
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Direct Submission
Submitted (18-JAN-1996) D.J. Blake, Genetics Laboratory, Dep. of
Biochemistry, Univ. of Oxford, South Park Road, Oxford, Oxfordshire
POCLVWLPLLHRLANVENVEHPVECSYCHSESMAGFRYRCQQCHNYQLCQDCFWRGHA
GGSHSNQHQMKEYTSWKSPAKKLTNALSKSLSCASSREPLHPMFPDQPEKPLNLAHIV
PPRPVTSMNDTLFSHSVPSSGSPFITRSSDGAHGGCV"
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Blakb.J., Nawrotzki,R., Peters,M.F., Froehner,S.C. and Davies, K.E.
Isoform diversity of dystrobrevin, the murine 87-kDa postsynaptic
                                                                                                                                                                                                                                                                                       64 TGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACAG 123
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                                                                                                                                                                                                   4 ACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTGT
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(clone m32).
                                                                                                                                     DB 10;
                                                                                                                                   Score 186.2; DB 10;
Pred. No. 1.5e-47;
0; Mismatches 127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. Biol. Chem. 271 (13), 7802-7810 (1996)
96205975
8631824
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/db_xref="taxon:10090"
/clone="m32"
/tissue_type="brain"
/dev_stage="adult"
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87 kDa protein; dystrobrevin.
Mus musculus.
Mus musculus
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68.6%;
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1570. .1575
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KKCNHILVDVIMNYTEALRENALNNLDPNIELNAYRLEAVLSTIFYQLNTRYPTHQ1
HVEOSISLLLNFLLAFEPPEGHGKISVFAVKMALATLCGGKIMDKLRYIFSNISDSSG
VMYGRYDQPLAEVLKLPTAVFEGFPSKGYTEQSARSCFSQQKKVTLNGFLDTLMSDPP
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East Adams St., Syracuse, NY 13210,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutherla; Rodentla; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 1593)
Enigk, R.E. and Maimone, M.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Differential expression and developmental regulation of a novel alpha-dystrobrevin isoform in muscle Gene 238 (2), 479-488 (1999)
                                                                                                                                       183
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                                                                                                                                                                                                                                      472
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     63
                                                                                      ACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCCATCAGTCTCCTACTCA
                                                                                                                                                                                                                                                                                       235 ACCTACAGGACAGCATGTAAGCT-TCGATTTGTGCAGAAAAAATGCAATGTGCACTTGGT
                                                                                                                                                                                                                          ATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNTA
                                                                                                                                                                                                                                                                                                                                    AAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATTTTGT
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   ACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGGGATGCAACCTTCATCTTGT
                                                                       TGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACAG
                                                                                                                                       CACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                       /map="between markers D18Mit62 and D18Mit23"
/clone="11.2"
                                                                                                                                                                                                                                                                                                                                                                                                       CCCAGATGTCAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT 414
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Mus musculus alpha-dystrobrevin 3 mRNA,
AF143542
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. 1593 /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /protein_id="AAD33913.1"
/db_xref="GI:4929245"
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Submitted (16-APR-1999) Anatomy
Science Center at Syracuse, 750
USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 (bases 1 to 1593)
Maimone, M.M. and Enigk, R.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /cell_line="BC3H1"
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ROD 24-APR-1996

linear

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PPRPVTSMNDTLFSHSVPSSGSPFITRSSPPKDSEVEQNKMLARAAPAFLKGRGIQYS
TVAPARLABEBHVLIGLYVNMLINNPPCPMLESSNRADBEHRLARRYAARAESSSGOP
TQQRSAPDTSFTIDANKQORQLIABLENKNREILQETQRLYVBHEQASQPTPERAQON
PTLLAELRLRQRKDELEQRRASALQESRRELMVQLEGLMKLLKEEELKGCWHHEIIPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HVEQSISLLLNFLLAAFDPEGHGKISVFAVKMALATLCGGKIMDKLRYIFSMISDSSG
WYGGRYDGFLREVLKLPTAVFEGPSFSTEGSARSCFSGOKKYVTLGFLDTLASDPP
POCLWLPLLHRLANVENVERPVEGSYCHSESMAGFRYRCPGCHNYOLCODCFRRGHA
GGSHSNQHQMKEYTSWKSPAKKLTNALSKSLSCASSREPLHPMFPDQPEKPLNLAHIV
Direct Submission
Submitted (16-APR-1999) Anatomy and Cell Biology, SUNY Health
Science Center at Syracuse, 750 East Adams St., Syracuse, NY 13210,
USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /translation="miedsgkrgnymaerrqlfaemraqdldrirlstyrtacklrfy
Qkkcnlhlydimnviealrenalnnldpnielnvarleavlstifyqlnkrmptyhqi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGACATTTGGAACGTCATTGAAGCATTGCGCGAAAACGCTTTGAATAACCTGGACCCAAA 408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTICCIGCICGCAGCCITIGACCCGGAAGGCCAIGGAAAAAICICAGIATIIGCIGICA 587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 ACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTGT 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNTA
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/tissue_type="skeletal muscle"
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X95226
X95226,1 GI:1246782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 186.2; DB 1
Pred. No. 1.6e-47;
                                                                                                                                                                                                                                                                                                                                                                                /product-"alpha-dystrobrevin
/protein_id-"AAD33915.1"
/db_xref-"GI:4929249"
                                                                                                                                                   /organism="Mus musculus"
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/chromosome="18"
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                                                                                                                      /db_xref="MGD:MG:106039"
/db_xref="SPTREMBL:061498"
/translation="MIEDSGRRGNTMARRROLPAEMRAQDLDRIRLSTYRTACKLRFV
OKKCHLHLLVDIWNVIEALRENALNNLDPNIELNVARLEAVLSTIFYQLNKRMPTHQI
HVEOSISLLLARLLAAFDPEGHGKISVFAVKMALATLCGGKIMDKLRYISMSDSS
VMVYGRYDQFLREVLKLPTAVFEGPSFGYTEQSARSCFSQQKKVTLNGFLDTLMSDPP
PQCLVWLPLLHRLANVENVFHPLECSYCHSESMMGFRYRCQQCHNYQLCQDCFWRGHA
                                                                                                                                                                                                                                                                                                      GGSHSNQHQMKEYTSWKSPAKKLTNALSKSLSCASSREPLHPMFPDQPEKPLNLAHIV
DTWPPRPVTSMNDTLFSHSVPSSGSPFITRSMLESSNRLDEEHRLIARYAARLAAESS
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AQQNPTLLAELRLLRQRKDELEQRMSALQESRREIMVQLEGLMKLLKEEELKQGVSYV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
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AF143544.1 GI:4929248
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Pred. No. 1.6e-47;
0; Mismatches 127;
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                                                  /product-"dystrobrevin"
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/db_xref-"G1:1246785"
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Maimone, M.M. and Enigk, R.E.
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/codon_start=1
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Direct Submission
Submitted (18-JAN-1996) D.J. Blake, Genetics Laboratory, Dep. of
Blochemistry, Univ. of Oxford, South Park Road, Oxford, Oxfordshire
OXI 3QU, UK
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PPRPYTSMNOTLFSHSYPSGGSPFITRSMLESSNRLDEEHRLIARYAARLAAESSSSS
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ADSITNTMSSLVKELNSEVASETESTVDSEFSRPQFEDLAPSPTSEKAFLAQIHSRKP
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                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 2607)
Blake,D.J., Nawrotzki,R., Peters,M.F., Froehner,S.C. and Davles, K.E.
Isoform diversity of dystrobrevin, the murine 87-kDa postsynaptic
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0; Mismatches 127; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /product="dystrobrevin"
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    protein; dystrobrevin.
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GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES	

		Description	Human poul manue	DNA encoding novel	DNA encoding novel	Human lung cancer	Drosophila melanog	Drosophila melanog	Human drawn merca	Human ovarian canc	Human secreted pro
SOMMAKIES	•	ID	ABK70286	AAS73627	AAS73629	ABK70157	ABL14199	ABL14198	AA060778	ABL87347	AAC01269
		DB	24	23	23	24	23	23	14	24	21
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,	Query	re Match Length DB ID	76.9	44.2	43.8	43.7	36.4	22.8	19.7	18.9	17.2
		Score	318.4	183	181.4	. 181	150.8	94.2	81.4	78.4	71.2
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KW X	Human	lan; 55;	dene;	lung ca	ncer	; cytostatic; tumour; v	accine.
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PI	Ben	son DR,	Mohamath	ath R,	Lode	es MJ;	
DR	WPI	.; 2002-	372001/	.40.			
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PT	as a	vaccines	and	proceins and for treating,	and ting,	nucieic acids encoding i preventing, diagnosing	the proteins, userui g or monitoring lung

(first entry)

13-FEB-2002

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The invertion features to an isolated polynucleotide competition as selected from 183 human DNA sequences (appearing as ABK701310-ABK70312), or their fragments, homologues, variants or complements and their encoded polypeptides. Also included are an expression vector comprising the colypeptides. Also included are an expression control sequence; a host cell transformed or transfected with an expression control sequence; a host cell transformed or transfected with an expression vector of; an isolated contibody, or its antipod brinding fragment that specifically binds to the polypeptide; a method for detecting the presence of a cancer in a patient; a fusion protein comprising at least the polypeptide; an oligonucleotide that hybridises to the polymelocidetide under moderately citingent conditions; a method for stimulating and/or expanding T cells specific for a tumour protein; an isolated T cell population comprising T cells specific for a tumour protein; an isolated T cell population of above; a composition comprising T first component consisting of carriers and immunostimulates, and a second component selected from the polynucleotides, proteins, antibodies, fusion presenting cells expressing the polypeptide; methods for stimulating an immune response or treating cancer in a patient by administering the composition and diagnostic kits comprising at least one of the oligonucleotide of, or an antibody and a detection reagent consisting of a reporter group. The polypurcleotide, polypeptide and antigen presenting cells cancer. The colynucleotide, polypeptide and antigen presenting cells can be comprised and antigen presenting cells can be consisted and antigen presenting cells can be comprised by bypeptide and antigen presenting cells for underdides proteins and proteins and proteins and proteins of tumor polypeptides and pridess and proteins in tumor cells called thybridisation, and in the preparation of tribozyme molecules for cells. The present sequence is one of the 183 lung cancer associated
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                                                                                                     The invention relates to an isolated polynucleotide comprising
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2247 BP; 591 A; 606 C; 612 G; 438 T; 0 other;
                                                  Page 160-161; 189pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polynucleotides
                                                  Claim 1;
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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in disgnostics as expressed ageuence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving to restore normal activity of (II) or to treat disease states involving continuitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical maging of sites expressing (II). (I) and (II) are useful for treating clisorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and and and an anino acid sequences. Absolvible trains and products dependent on DNA and and answer of the product of the pr
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Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                      Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
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                                                                                                    DNA encoding novel human diagnostic protein #9431.
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2000US-0649167
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Best Local Similarity
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AAS73627 standard; cDNA; 2518 BP

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        ACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTACTCA
                     ATTICATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNTA
                                                                   AAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATTTTCT
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                                                                                                                                                                                                                                                                                              DNA encoding novel human diagnostic protein.#9433.
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2000US-0649167
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23-AUG-2000;
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diagnostic coding sequences of the invention. Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; ss; gene; lung cancer; cytostatic; tumour; vaccine.
                                                                                                                                                                                     43.8%; Score 181.4; DB 23; Length 67.9%; Pred. No. 7.3e-52; Ive 0; Mismatches 130; Indels
                                                                                                                                       Sequence 2520 BP; 714 A; 636 C; 598 G; 569 T; 3 other;
                                                                                at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human lung cancer associated cDNA DMSM-52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lodes MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK70157 standard; cDNA; 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-SEP-2000; 2000US-234837P.
10-OCT-2000; 2000US-239440P.
29-JUN-2001; 2001US-301928P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-SEP-2001; 2001WO-US42232.
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                                                                                                                                                                                     Query Match
Best Local Similarity 67.9°
Matches 279; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mohamath R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-372001/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CORI-) CORIXA CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
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Drosophila melanogaster.

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RESULT 6
ABL14198/C
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                                                                               The invention relatices to an isolated polynucleotide compprising a sequence selected from 183 human DNA sequences (appearing as ABK70130-ABK70112), or their fragments, homologues, variants or complements and their encoded copylynucleotide operably linked to an expression vector comprising the polynucleotide operably linked to an expression control sequence; a host cell transformed or transfected with an expression vector of; an isolated contibody, or its antipod, in the antipod for detecting the presence of a cancer in a patient; a fusion protein comprising at least the polypeptide; an exthod for detecting the presence of a cancer in a conjecuncieotide that hybridises to the polynucleotide under moderately conjecuncieotide that hybridises to the polynucleotide under moderately stringent conditions; a method for stimulating and/or expanding T cells specific for a tumour protein; an isolated T cell population comprising T cells specific for a tumour protein; an isolated T cell population comprising a first component selected from the method of above; a composition comprising a first component selected from the polynucleotides, proteins, and a second component selected from the polynucleotides, proteins, and antigen presenting cells expressing the polypeptide; methods for stimulating an immune response or treating cancer in a patient by administering the composition and diagnostic kits comprising at least one of the oligonucleotide of, or an antibody and a ceptual solution and in the preparation of such cancer. The polypetides and moligen presenting cells cape to belymented to expand an expandence of the proparation of tumor polybetides and present sequence and present sequence is one of the 183 lung cancer associated cells. The present sequence is one of the 183 lung cancer associated
                                                                        relates to an isolated polynucleotide comprising a sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCTACTACTATCAGTTG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            379 CCACCGAGATCA-GTGTGTCCCGCCTCGAAACTGTCATCTCCATCTACTATCAGTTG 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCCTACTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila; developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 43.7%; Score 181; DB 24; Length 512; Best Local Similarity 87.0%; Pred. No. 4e-52; Matches 221; Conservative 0; Mismatches 31; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 512 BP; 127 A; 135 C; 141 G; 109 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABL14199 standard; cDNA; 3045 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              243 AATTTCATGGTCGC
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The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA sequences (ABL16176-ABL30511), expressed DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    148
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                269 TGAGGGCCGAGGCANGTTGACCGTGTTTCAGNTAAAGCTATGTTAGCAACCATGTGTGG 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89 ITCCGAGACAATGGCCTTAACACGCTGGACCACACGCACGGAGATCAGGCGTGTNCCGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      36.4%; Score 150.8; DB 23; Length 3045; 63.2%; Pred. No. 3.3e-41; ive 0; Mismatches 141; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 37079; 21pp + Sequence Listing; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                            Myers EW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATGATGTTNGGAAAGCTTGACCAGT 414
                                                                                                                                                                                                                                                            PWD,
                                                                                                                                     23-MAR-2000; 2000US-191637P. 11-JUL-2000; 2000US-0614150.
                                                                                         23-MAR-2001; 2001WO-US09231
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                                                                                                                                                                                                                                                         Venter JC, Adams M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                        WPI; 2001-656860/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ABB57737-ABB72072)
                                                                                                                                                                                                                                                                                                                                 P-PSDB; ABB70096
                                                                                                                                                                                                               (PEKE ) PE CORP
WO200171042-A2
                                                                                                                                                                                                                                                                                                                                                                                                                            interactions
                                            27-SEP-2001
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(first entry)

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Gene transcription product, genetic markers; tagging; in vivo; transcription; mapping; locations; chromosomes; chromosomal; ss.
                                                                                                                                                                                                                                                                                                          Enriched oligonucleotides and corresp. sequences - used as markers for human genes transcribed in-vivo, facilitate tagging
                                                           Human brain Expressed Sequence Tag EST00891
                                                                                                                                                                                                                                       (USSH ) US DEPT HEALTH & HUMAN SERVICE.
                                                                                                                                                                                                                                                                                                                                                         Example 4; Page 388; 500pp; English.
                                                                                                                                                                                                                                                                                   WPI; 1993-272882/34.
                                                                                                                                                                                                                                                                                                                                  of most human genes
                                                                                                                     Homo sapiens.
                                                                                                                                                                                         12-FEB-1993;
                                                                                                                                                                                                               12-FEB-1992;
                                    16-MAR-1994
                                                                                                                                           W09316178-A
                                                                                                                                                                  19-AUG-1993
                                                                                                                                                                                                                                                            Adams MD,
             AAQ60778;
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                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid detection reagent for detecting 1000 or more genes from Drosophila and for elucidating cell signalling and cell-cell
                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invention useful in developmental biology and in elucidating cell signalling and cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABL16176-ABL30311), expressed DNA sequences (ABL01840-ABL16175) and the encoded proteins
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29 CGATTTGTACAGAAGCGATGCAACCTTCATCTTGTTGATATCTGGAATATGATCGAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89 TTCCGAGACAATGGCCTTAACACGCTGGACCACAGGAGGAGATCAGGCGTGTNCCGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCAGCGTGGAGCAGTCCATCAGTCTCCTACTCAATTTCATGGTCGCCGCCTACGACAG
                                                                    Drosophila melanogaster expressed polynucleotide SEQ ID NO 37076
                                                                                         developmental biology; cell signalling; insecticide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 15987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 15987 BP; 4295 A; 3570 C; 3827 G; 4295 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 37076; 21pp + Sequence Listing; English.
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Best Local Similarity 64.6%; Pred. No. 3.6e-21;
Matches 155; Conservative 0; Mismatches 84;
                                                                                                                                                                                                                                                                                   Myers EW;
ABL14198 standard; cDNA; 15987 BP
                                                                                                                                                                                                                                                                                  PWD,
                                                                                                                                                                                                                      33-MAR-2000; 2000US-191637P.
                                                                                                                                                                                                23-MAR-2001; 2001WO-US09231
                                             (first entry)
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                                                                                                     pharmaceutical; gene; ss
                                                                                                                             Drosophila melanogaster
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                                                                                                                                                                                                                                                                                                        2001-656860/75
                                                                                                                                                                                                                                                          (PEKE ) PE CORP NY
                                                                                                                                                                                                                                                                                                       WPI; 2001-656860,
P-PSDB; ABB70095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   specification,
                                                                                                                                                  WO200171042-A2
                                             26-MAR-2002
                                                                                          Drosophila;
                                                                                                                                                                         27-SEP-2001
                                                                                                                                                                                                                                                                                 Venter JC,
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Venter

Moreno RF,

93WO-US01294

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The Expressed Sequence Tag was isolated from a human brain cDNA library as part of a large set of ESTs which can be used as markers for human genes transcribed in vivo. They can be used to facilitate tagging of most human genes, for mapping locations of expressed genes on chromosomes, for individual or forensic identification, for mapping locations of disease-associated genes, for identification of tissue type, and for prepn. of antisense sequences, probes and constructs type, and for prepn. of antisense sequences, probes and constructs estro0891 has an "excellent" coding probability as evaluated using the coding-region prediction program CRM. See also AAQ59041-Q61440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           64 TGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACAG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124 CACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTA-TCAGTTG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 ACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTGT 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          188 GGACATATGGAATGTCATAGAAGCATTGCGGGAAAATGCTCTGAACAACCTGGACCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  183 AACAAGCGCCTTCC---TTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
9
                                                                                                                                                                                                                                                                                                                                                                               Score 81.4; DB 14; Length 472; Pred. No. 1.3e-17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                    Sequence 472 BP; 132 A; 100 C; 110 G; 120 T; 10 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          367 CTTAACTINCIGCTIGCAGCGT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABL87347/c
ID ABL87347 standard; cDNA; 689
                                                                                                                                                                                                                                                                                                                                                                            19.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCAATTTCATGGTCGCCGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 173; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
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AAQ60778 standard; DNA; 472 BP.

RESULT 7 AAQ60778

4,

(first entry)

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Human secreted protein 5' EST, SEQ ID NO: 1267.
            06-0CT-2000
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 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQ
                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a composition (I) comprising: carriers and immunostimulants; and a polypeptide (II) of a ovarian tumour polypeptide encoded by a polynucleotide (III) having a cDNA sequence (S1) from the 10912 nucleotide sequences as given in ABL/7023 to ABL87934, (III) encoding (II) having a sequence (S2), a T cell oppulation of (II), or antigen presenting cells that express (II).

(I) has cytostatic activity. An oligonucleotide (IV) that hybridises to (S1) can be used for detecting ovarian cancer in a patient's biological sample preferably serum or ovarian tissue. The method comprises contacting a biological sample from a patient with (IV), detecting the amount of polynucleotide hybridising to (IV) and comparing the amount to a predetermined cutoff value and thereby detecting ovarian cancer in the catch of polynucleotide hybridising to (IV) and comparing to patient, where the amount of polynucleotide hybridising to (IV) is chetcing preferably by polymerase chain reaction (PCR). (I) comprising (III) and/or (II) is useful for stimulating and/or expanding T cells contacting T cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  with (III) or (II). (III) is useful in design and preparation of ribozyme molecules for inhibiting expression of the tumour polypeptides and proteins in tumour cells; and to isolate a full length gene from a suitable library e.g., a tumour cDNA library using well known
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313 TAGCAACCATGTGTGGTGGAAAATGCTGGACAAATTGAGATACATTTTCTCCCAGATGT 372
                                                                                                                                                                                                                                                                                                                            Composition for therapy and diagnosis of ovarian cancer comprising polypeptide of a ovarian tumor polypeptide, polynucleotide encoding polypeptide, antibody specific to polypeptide or T cell expressing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 78.4; DB 24; Length 689;
Pred. No. 1.8e-16;
                                                                                Human; ovarian cancer; ovarian tumour; cytostatic; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Indels
                                                     Human ovarian cancer related cDNA clone SEQ ID NO:10325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 689 BP; 201 A; 156 C; 161 G; 162 T; 9 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            373 CAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID 10325; 489pp; English.
                                                                                                                                                                                                                                                                            Jones R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC01269 standard; cDNA; 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               th 18.9%;
Similarity 83.3%;
85; Conservative
                                                                                                                                                                                          29-MAY-2001; 2001WO-US17756.
                                                                                                                                                                                                                    26-MAY-2000; 2000US-207484P
                           (first entry)
                                                                                                                                                                                                                                                                           Harlocker
                                                                                                                                                                                                                                                                                                     WPI; 2002-122075/16.
                                                                                                                                                                                                                                               (CORI-) CORIXA CORP
                                                                                                                                    WO200192581-A2
                                                                                                            Homo sapiens.
                         17-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                          polypeptide
                                                                                                                                                                06-DEC-2001
                                                                                                                                                                                                                                                                           Algate PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cechniques
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAC01269;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 9
AAC01269
                                                                                                                                                                                                                                                                                                };×₽₽₽₽$פ×888888888888888888888888
g
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The present sequence is one of a large number of 5' ESTS derived from mRNAs encoding secreted proteins. An ORF has been identified within the sequence. The 5' ESTS were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intext 5' ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures. They are used to obtain upstream regulatory sequences and to design expression and secretion
expressed sequence tag; secreted protein; cDNA isolation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64 TGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACAG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 ACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTGT 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  124 CACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCA 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 458 BP; 145 A; 77 C; 114 G; 121 T; 1 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 71.2; DB 21
Pred. No. 4.4e-14;
1; Mismatches 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Giordano J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID 1267; 71pp + CD-ROM; English.
                                gene therapy; chromosome mapping; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Duclert A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAS31142 standard; cDNA; 5106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17.2%;
69.7%;
                                                                                                                                                                                                                                                                             21-FEB-2000; 2000EP-0200610.
                                                                                                                                                                                                                                                                                                                                       99US-0122487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 122; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dumas Milne Edwards J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-500381/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAG01263
   EST;
                                                                                                                                                                                                                                                                                                                                                                                                    (GEST ) GENSET
                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                          26-FEB-1999;
                                                                                                                                                      EP1033401-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2001
                                                                                                                                                                                                                   06-SEP-2000.
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      Human;
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PA, Banville SC, Shah P, Chalup MS, Chang SC;
Amshey S, Dahl CR, Dam TC, Daniels SE;
V, Fong WT, Greenawalt LB, Hillman JL, Jones AL;
AM, Rosen BH, Russo FD, Stockdreher TK, Daffo A;
Y JY, Brädley DL, Bratcher SR, Chen W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapeutic proteins, e.g. in diagnostics and therapeutics
                                                                           leukaemia;
                                                 receptor; diagnostic; therapeutic; gene therapy; vaccine;
                                                                       cell proliferative disorder; Crohn's disease; lymphoma; leukaem
acquired immune deficiency syndrome; AIDS; autoimmune disorder;
Human diagnostic and therapeutic polynucleotide (DITHP) #157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fong m.,

1, Rosen BH, Russo FD,

Yu JY, Bradley DL, Bratch

Yu JY, Bradley DL, Bratch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polynucleotides encoding diagnostic and enzymes, hormones and receptors, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 370-371; 522pp; English.
                                                                                                                                                                                                                                                                                                   21-FEB-2001; 2001WO-US06059
                                                                                                                                                                                                                                                                                                                                                                                           2000US-0184698
2000US-0184768
                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0184769.
2000US-0184770.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0184772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0184773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0184776
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0184771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0184813
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0184774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0184777
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                                                                                                                    respiratory disorder; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Panzer SR, Spiro PA, Br
Chen A, D'Sa SA, Amshe
Dufour GE, Flores V, Fr
Liu TF, Roseberry AM,
Wright RJ, Yap PE, Yu
Cohen HJ, Hodgson DM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-502867/55.
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                                                                                                                                                                                                         WO200162927-A2
                                                                                                                                                                                                                                                                                                                                                                 24 FEB - 2000;

24 FEB - 2000;

4 FEB - 2000;

24 FEB - 2000;

25 FEB - 2000;

26 FEB - 2000;

27 FEB - 2000;

28 FEB - 2000;

29 FEB - 2000;

20 FEB - 2000;

20 FEB - 2000;

21 FEB - 2000;

22 FEB - 2000;

23 FEB - 2000;

24 FEB - 2000;

25 FEB - 2000;

26 FEB - 2000;

27 FEB - 2000;

28 FEB - 2000;

29 FEB - 2000;

20 FEB - 2000;

20 FEB - 2000;

21 FEB - 2000;

22 FEB - 2000;

24 FEB - 2000;

25 FEB - 2000;

26 FEB - 2000;

27 FEB - 2000;

28 FEB - 2000;

29 FEB - 2000;

20 FEB - 2000;
                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-MAY-2000;
                                                                                                                                                                                                                                                      30-AUG-2001
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The invention relates to polynucleotides (I) encoding diagnostic and therapeutic (DITHP) polypeptides (II), which include e.g. enzymes, and proteins involved in growth and development and receptors. (I) and (II) may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate DITHP expression. For example, (I) and (II) may be used to treat disorders associated with decreased polypeptide expression by rectifying mutations or deletions in a patient's genome,

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that affect the activity of the DITHPS, by expressing inactive proteins or supplementing the patient's own production of them. (I) and (II) may be used to treat diseases, for example, cell proliferative disorder, crohn's disease, acquired immune deficiency syndrome (AIDS), lymphoma, leukaemia, autoimmune disorders, and respiratory disorders. Additionally, (I) may be used to produce the DITHPS, by inserting the nucleic acids into a host cell and culturing the cell to express the protein. (I) and its complementary sequences may also be used as DNA probes in diagnostic assays to detect and quantitate the presence of similar nucleic acids in samples, and therefore which patients may be in need of restorative antibodies against DITHPS and in assays to identify modulators of DITHP expression and activity. The anti-DITHP antibodies and antagonists may also be used to administrative the production of all and activity. The anti-DITHP antibodies and antagonists may also be used to down required expression and activity. The anti-DITHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1711 CCTGGTCAATGTGCCACTCTGTGTGGACATGAGCCTCAATTGGCTCCTCAATGTTTTGA 1770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 266 CACTGAGGGCCGAGGCANGTTGACCGTGTTTCAGNTAAAGCTATGTTAGCAACCATGTG 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 206 CCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTACTCAATTTCATGGTCGCCGCCTACGA 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer; phage vector; bacteriophage lambda; gene therapy; antisense RNA; ribozyme; delivery; vaccine; antigen; treatment; prevention; in vitro; AIDS; cancer; cystic fibrosis; acquired immune deficiency syndrome; Gaucher's disease; haemophilia; post-translational modification; diagnostic reagents; production;
                                                                                                                                                                                                                                                                                      antibodies may also be used as diagnostic agents for detecting the presence of DITHPS in samples (e.g. by enzyme linked immunosorbant assay (ELISA), AAS3096-AAS31196 represent human diagnostic and therapeutic (DITHP) polynucleotides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Improved gene therapy with phage vectors unable to release genetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTGGAAAAATGCTGGACAAATTGAGATACATTTTCTCCCAGATGTCAGATTC 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                   9.5%; Score 39.2; DB 22; Length 5106; 11.1%; Pred. No. 0.022;
                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5106 BP; 1248 A; 1387 C; 1268 G; 1203 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BGHM ) BRIGHAM & WOMENS HOSPITAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sarkar SN:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV18885 standard; cDNA; 13815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus dystrophin cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 51.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97WO-US12928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0814859
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dubin DB, Kupper TS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1998-145345/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dystrophin; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 326
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV18885
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Sequence 13815 BP; 4577 A; 2719 C; 3025 G; 3494 T; 0 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention describes a composition comprising a mini-dystrophin peptide comprising a spectrin-like repeat domain, where the domain comprises n spectrin-like repeats, and contains no more than in spectrin-like repeats, where n is an even number between 4-24, or a nucleic acid encoding a mini-dystrophin peptide. The mini-dystrophin peptide or the polynuclectide encoding it is useful as a medicament, for preparing a drug for therapeutic application and in the preparation of a composition for treatment of muscle disease, e.g. Duchenne's muscular dystrophy (DMD). This sequence encodes mouse dystrophin used in the creation of the mini-dystrophin peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                            300 GNTAAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATT 359
                                                                                                                                                                                                                                                                                    240 CTCAATTTCATGGTCGCCGCCTACGACAGTGAGGCCCGAGGCANGTTGACCGTGTTTTCA 299
                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             domain; muscle disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A composition for preparing therapeutic drugs, has a mini-dystrophin peptide comprising a specific number of spectrin-like repeat domains, or a nucleic acid sequence encoding the mini-dystrophin peptide
material into cells - comprises surface ligand binding to cell-surface receptor, and transcribing nucleic acid in cell, useful
                                                                                                              The sequence is that of murine full length dystrophin cDNA which. was used in construction of a chimeric bacteriophage lambda vector.
                                                                                                                                                                                                                                                                                                             9794 TITAAAACTGGCATCATTTTCTCTGTGTAAAGCACACTTGGAAGACAAGTACAGATACCTT
                                                                                                                                                                                                         DB 19; Length 13815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mini-dystrophin peptide; spectrin-like repeat domain; muscle Duchenne's muscular dystrophy; DMD; dystrophin; mouse; gene;
                                                                                                                                                                     Sequence 13815 BP; 4582 A; 2731 C; 3012 G; 3490 T; 0 other;
                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                             Score 38.2; DB 19;
Pred. No. 0.085;
                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                             9854 TTCAAGCAAGTGGCAAGTTCAACTGGCTT 9882
                                                                          Example 9; Pages 80-85; 110pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                     360 TTCTCCCAGATGTCAGATTCCAATGGCTT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 2; 145pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK81960 standard; DNA; 13815 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA encoding mouse dystrophin
                                                                                                                                                                                                                          53.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-OCT-2000; 2000US-238848P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-OCT-2001; 2001WO-US31126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                            Best_Local Similarity, 53.0
Matches 79; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chamberlain JS, Harper
                                         e.g. treating AIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UNMI ) UNIV MICHIGAN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK81960;
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The present invention describes a method for examining ischaemic conditions, comprising measuring the expression levels of particular genes (I) in a test sample or determining the expression profile of a gene group in the sample comprising genes selected from (I). The method is useful for examining the ischaemic condition (e.g. compressive ischaemia, occlusive ischaemia or vasospastic ischaemia) by measuring expression levels of particular genes (AB199202 to AB19912, encoding the protein sequences in ABB57020 to ABB57374) or by determining the expression profile of a gene group comprising these genes. The expression levels or expression profiles produced by these genes are used as an indicator when screening for ischaemic condition-improving represent PCR primers for a mouse ischaemic condition related sequence, which are used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Examining the ischemic condition (e.g. occlusive ischemia) by measuring expression levels of particular genes defined in the specification or by determining the expression profile of a gene group comprising these
                                                                                                                                                                                                                                                                                                                         9794 TTTAAAACTGGCATCATTTCTCTGTGAAAGCACACTTGGAAGACAAGTACAGATACCTT 9853
                                                                                                                                                                                                    9734 CTCAACTGGCTTCTCAATGTTATGATACGGGACGAACAGGAGGATCCGTGTCCTGTCT 9793
                                                                                                                                      240 CICAAITICAIGGICGCCGCCIACGACAGIGAGGGCCGAGGCANGTIGACCGIGITIICA 299
                                                                           Gaps
                                                                                                                                                                                                                                                                        300 GNTAAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mouse; ischaemia; compressive ischaemia; occlusive ischaemia; vasospastic ischaemia; ischaemic condition; ischaemic disease;
      Length 13815;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse ischaemic condition related cDNA sequence SEQ ID NO:904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13815 BP; 4577 A; 2719 C; 3025 G; 3494 T; 0 other;
                                                                           Indels
                 2;
0.085;
70;
          DB 24;
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   Score 38.2; DB
Pred. No. 0.085
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYNI-) UNIV NIHON SCHOOL JURIDICAL PERSON.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        9854 TICAAGCAAGTGGCAAGTTCAACTGGCTT 9882
                                                                                                                                                                                                                                                                                                                                                                                                           360 TICICCCAGAIGICAGAITCCAAIGGCIT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABI99799 standard; cDNA; 13815
          9.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-MAY-2001; 2001WO-JP04192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000JP-0145977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
Query Match
Best Local Similarity 53.0°
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAR-2002
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4891 TITAAAACTGGCATCATTTCTCTGTGTAAAGCACACTTGGAAGAAGCAAGTACAGATACCTT 4832

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300 GNTAAAGCTATGTTAGCAACCATGTGTGGGAAAAATGCTGGACAAATTGAGATACATT

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                                                                         9794 TTTAAAACTGGCATCATTTCTCTGTGTAAAGCACACTTGGAAGACAAGTACAGATACCTT 9853
                                                                                                           300 GNTAAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATT 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shuttle vector pAdDel.CMVDys (AAT27558) comprises the adenovirus cis elements needed for replication and virion encapsidation but is deleted of all viral genes. It carries a mouse dystrophin minigene under control of the CMV promoter. It is used with a helper virus that supplies the sequences needed for a productive viral adenovirus is produced that is characterized by high ther transgene delivery to host cells and the ability to stably integrate the transgene into the host cell chromosome. Such a vector can be used
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Recombinant adenovirus produced from shuttle vector and helper virus has crippled packaging function, useful for delivering
                                                      240 CTCAATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCA
                                ö
     Length 13815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    transfer the dystrophin gene for use in muscular dystrophy
                                                                                                                                                                                                                                                                                                                                                                                  Adenovirus type 5; Ad5; vector; gene therapy; gene transfer; helper virus; dystrophin; muscular dystrophy; ds; cyclic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19307 BP; 4816 A; 4393 C; 4056 G; 6042 T; 0 other;
                                Indels
 Score 38.2; DB 24;
Pred. No. 0.085;
0; Mismatches 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wilson JM;
                                                                                                                                                                                     360 TICICCCAGAIGICAGAIICCAAIGGCIT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 9; Fig 12A-12P; 149pp; English.
                                                                                                                                                                                                                                                                      CDNA; 19307 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Weitzman
9.2%;
                                                                                                                                                                                                                                                                                                                                                      Shuttle vector pAdDel.CMVDys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    - has crippled packaging functions ransgene(s) to target cells
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                                                                                                                                                                                                                                                                                                                             (first entry)
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                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-251463/25.
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NAT27558 standard;
                Similarity
  Query ...
Best Local Simia
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                                                                                                                                                                                                                                                                                                 AAT27558;
 Query Match
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                                                                                                                                                            muscle disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   209 GATCAGCGTGGAGCAGTCCATCAGTCTCCTACTCAATTTCATGGTCGCCGCCTACGACAG 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  269 TGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNTAAAGCTATGTTAGCAACCATGTGTGG 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  168 GGTCAACGTCCCTCTCTGCGTGGATATGTGTCTGAACTGGCTGCTGAATGTTTATGATAC 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGACGAACAGGGAGGATCCGTGTCCTTTTAAAACTGGCATCATTTCCCTGTGTAA 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAAAAATGCTGGACAAATTGAGATACATTTTCTCCCAGATGTCAGATTCCAATGGCTT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              domains,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          has a mini-dystrophin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A composition for preparing therapeutic drugs, has a mini-dystro peptide comprising a specific number of spectrin-like repeat dom or a nucleic acid sequence encoding the mini-dystrophin peptide
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                                                                                                                                                          Mini-dystrophin peptide; spectrin-like repeat domain; m
Duchenne's muscular dystrophy; DMD; dystrophin; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 887 BP; 244 A; 207 C; 213 G; 223 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9.0%; Score 37.2; DB 24;
50.0%; Pred. No. 0.039;
""smatches 90;
                                                                                                                           Human dystrophin C-terminal polynucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, Fig 9; 145pp; English.
                              BP.
                            ABK81993 standard; DNA; 887
                                                                                                                                                                                                                                                                                                            04-OCT-2001; 2001WO-US31126
                                                                                                                                                                                                                                                                                                                                           06-OCT-2000; 2000US-238848P
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                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polynucleofide sequence us
peptides of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 50.0
                                                                                                                                                                                                                                                                                                                                                                                                          Harper
                                                                                                                                                                                                                                                                                                                                                                           (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-435334/46.
                                                                                                                                                                                                                                                                                                                                                                                                          Chamberlain JS,
                                                                                                                                                                                                                                            WO200229056-A2.
                                                                                           13-AUG-2002
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                                                                                                                                                                                                                                                                            11-APR-2002
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                                                             ABK81993;
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RESULT 15
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Matches
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               ABK81993
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Gaps

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Indels

70;

Score 38.2; DB Pred. No. 0.1; 0; Mismatches

9.2%;

Similarity 53.0 79; Conservative

Query Match

Best Local Matches 7

oy op

DB 17; Length 19307;

240 CICAATITCAIGGICGCCGCCTACGACAGIGAGGCCGAGGCANGTIGACCGIGIIITCA 299

Db , 288 AGCACATTTGGAAGACAAGTACAGATACCTTTTCAAGCGAAGTGGCAAGTTCAACAGGATT 347

Search completed: December 1, 2002, 16:24:34 Job time: 290 secs

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Page 1
                                                                                                                                                   Sequence 10, Appl
Sequence 10, Appl
Sequence 10, Appl
                                                                                                                                                                                       Sequence 10, Appl
Sequence 15, Appl
Sequence 104, Appl
Sequence 104, Appl
Sequence 104, Appl
Sequence 1084, Appl
Sequence 1088, Appl
Sequence 288, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 288, 2
Sequence 288, 2
Sequence 288, 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         282 AACTTACAGAACAGCCTGCAAATTA-CGATTTGTACAAAAGGATGCAACCTTCATTIII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 AACGTACAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63 TTGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341 TTGATATCTGGAACATGATTGAAGCCTTCGGAGAATGGCCTTAATGGACATGGACATGGACATAGAATGGCCTTAATACACTGGACATA 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 123 GCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTG 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15, Application US/09960253
Patent No. US20020361941
APPLICANT: BENSON, Darin R. APPLICANT: Benson, Darin R. APPLICANT: Denson, Darin R. APPLICANT: Codes, Michael J. TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY FILLE REFERENCE: 210121.556
CURRENT APPLICATION NUMBER: US/09/960,253
NUMBER OF SEC. TO NOT SERVICED TO NUMBER: US/09/960,253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   183 AACAAGGGCCTTCCTTCTACTCACCAGATCAGGGGGGGGAGCAGTCCATCAGTCTCCTACTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      243 AATTICATGGTCGCCGGCTACGAČAGTGAGGGCCGAGGCANGTTGACCGTGTTTCAGNT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 10; Length 2247;
                                                                                           10 US-09-822-830A-617

10 US-09-822-830A-617

11 US-10-023-52-10

12 US-10-023-523-10

9 US-10-023-523-10

9 US-01-018-605-74

10 US-09-964-82A-320

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10 US-09-9815-31-1076

10 US-09-9815-31-10884

10 US-09-989-722-288

10 US-09-989-722-288

10 US-09-989-723-288

10 US-09-989-731-288

10 US-09-999-732-288

10 US-09-999-732-288
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US-09-990-456-288
US-09-989-721-288
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Best Local Similarity 76.9%; Score 318.4; DB 1
Matches 365; Conservative 0; Mismatches 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 187
SOFTWARE: FASTSEO for Windows Version 4.0
                                                                                  TYPE: DNA
ORGANISM: HOMO Saplens
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                                                                        December 1, 2002, 16:20:13 ; Search time 53 Seconds (without alignments) 3008.260 Million cell updates/sec
                                                                                                                                          414
1 ctaacgtacagaacagcttg....gttnggaaagcttgaccagt 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 28, Appl
Sequence 28, Appl
Sequence 22, Appl
Sequence 22, Appl
Sequence 1992, Ap
Sequence 1, Appl
Sequence 3, Appl
Sequence 7522, Ap
Sequence 7522, Ap
Sequence 7522, Ap
Sequence 7522, Ap
Sequence 2, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 157, App
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Sequence 2805, Ap
Sequence 462, App
Sequence 462, App
                                                                                                                                                                                                                                                                                                                                                                  Published Applications_NA:*

: cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*

: cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*

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: cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*

: cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
Copyright (c) 1993 - 2002 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                     number of hits satisfying chosen parameters:
                                                                                                                                                                                                                       341543 segs, 192557720 residues
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0 US-09-960-253-28
0 US-09-867-701-10325
0 US-09-82-378A-22
0 US-09-980-107-2284
                                           . nucleic search, using sw model
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US-09-294-093B-1641
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Listing first 45 summaries
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US-09-764-868-489
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9 US-09-858-546-3
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Gapop 10.0 , Gapext 1.0
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Maximum DB seq length: 200000000
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Match Length DB
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43.7
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32.2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9712 GGICAAGGICCCICICIGGGIGGAIAIGIGICIGAACIGGCIGCIGAATGIIIAIGAIAC 9771
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        209 GATCAGCGTGGAGCAGTCCCATCAGTCTCCAATTTCATGGTCGCCGCCTACGACAG 268
                                                                                                                                                                                                                                                        313 TAGCAACCATGTGTGGAAAAATGCTGGACAAATTGAGATACATTTCTCCCAGATGT 372
                                                                                                                                                                                                                                                                                                  689 TAGCANCCATGTGGTGGANAAATGCTGGACAATTGAGANTATGTNTTCTCCCAGATGT 629
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TITLE OF INVENTION: Gene Expression profiles in Liver Cancer
                                                                                                                                                                          Length 689;
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Pred. No. 0.05;
0; Mismatches 90;
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                                                                                                                                                                                        Score 78.4; DB 10;
Pred. No. 5.6e-17;
0; Mismatches 17;
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APPLICANT: Bahou, Wadie
APPLICANT: Bahou, Wadie
APPLICANT: Sandalon, 21v
APPLICANT: Gnatenko, Dmitri
APPLICANT: Gnatenko, Dmitri
APPLICANT: Gnatenko, 100,102,102
TITLE OF INVENTION: Adenoviral vectors
FILE REPERENCE: STONYB-04970
CURRENT APPLICATION NUMBER: 60/237,747
PRIOR FILING DATE: 2001-02-12
PRIOR FILING DATE: 2000-10-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2284, Application US/09880107
Patent No. US20020142981A1
GENERAL INFORMATION:
APPLICANT: HORNE, Darci T.
APPLICANT: Scherf, Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22, Application US/09782378A Patent No. US20020102731A1 GENERAL INFORMATION:
                                                                                             NAME/KEY: misc_feature; LOCATION: (1)...(689)
OTHER INFORMATION: n = A,T,C or G; US-09-867-701-10325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9.0%;
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Matches 90; Conservative
                                                                                                                                                                                                      18.9%;
Query Match
Best Local Similarity 83.3%;
Matches 85; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
US-09-782-378A-22
                                     TYPE: DNA ORGANISM: HOMO sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 13957
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US-09-782-378A-22
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SEQ ID NO 10325
                         689
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                                   LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 AACGTACAGAACATGCAAGTACGATTTGTACAGAAGCGATGCAACCTTCATCTTG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-UY-00/-/UL-1U325, Application US/09867701

Sequence 10325, Application US/09867701

Settle No. US20020132237A1

SENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Adlate, Paul A.

APPLICANT: Alones, Robert

APPLICANT: Harlocker, Susan L.

APPLICANT: Harlocker, Susan D.

APPLICANT: Harlocker, Susan D.

APPLICANT: ADLACKER, Susan D.

APPLICANT: AND DIAGNOSITS OF OVARIAN CANCER

TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER

TITLE OF INVENTION: 20121.497

CURRENT APPLICATION NUMBER: US/09/867,701

CURRENT FILING DATE:

NUMBER OF SEQ ID NOS: 10912

NUMBER OF SEQ ID NOS: 10912
                                                                                               GENERAL INFURENTIALLY, Darin R. APPLICANT: Benson, Darin R. APPLICANT: Mohamath, Raddoh, APPLICANT: Mohamath, Michael J. APPLICANT: Mohamath, Michael J. APPLICANT: Mohamath. COMPOSITIONS AND METHODS FOR THE THERAPY TILE OF INVENTION: COMPOSITIONS OF LUNG CANCER ITLE OF INVENTION: AND DIAGNOSIS OF LUNG CANCER FILE REPERENCE: 21012.1.56 FILE REPERENCE: 21012.1.55 CURRENT FILING DATE: 2001-09-20 CURRENT FILING DAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 512;
                                                                                                                                                                                             Query Match 43.7%; Score 181; DB 10; Length 5 Best Local Similarity 87.0%; Pred. No. 2.7e-52; Matches 221; Conservative 0; Mismatches 31; Indels Matches 221; Conservative
                                                                                                                                                                                                                                                                                                                                                                               Sequence 28, Application US/09960253
Patent No. US20020123619A1
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US-09-960-253-28
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TYPE: DNA

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PROTEINS, ENCODING HUMAN SECRETED PROTEINS, AND
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APPLICANT: HUTHWACHER, KLAUS
APPLICANT: BREHME, JENNIFER
APPLICANT: PFEFFELLE, WALLER
TITLE OF INVENTION: NW MALLEY
FILE REFERENCE: 21123/280107/MAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135 GGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTGAACAAGGGCCTT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49 CAACCTICATCTIGTIGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAA 108
                                             86 GACGGAITIGITGICGACGACACCTICITCITCITCITCITCATGITCGACGACGICGII 27
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ilarity 60.2%; Pred. No. 0.63;
Conservative 0; Mismatches 35; Indels
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CURRENT APPLICATION NUMBER: US/09/858,546
CURRENT FILING DATE: 2001-05-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/825,345
CURRENT FILING DATE: 2001-04-04
PRIOR APPLICATION NUMBER: DE 100 46 228.6
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: DE 101 13 957.8
PRIOR FILING DATE: 2001-03-22
NUMBER OF SEQ ID NOS: 4
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 80959
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                                                                                                                                                                                                                                                    Sequence 1, Application US/09825345; Patent No. US20020106750A1; GENERAL INFORMATION:
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OTHER INFORMATION: n = A,T,C or
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OTHER INFORMATION: def gene
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Matches 53; Conserv
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                                                                                          195 CCTTCTACTC
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                                                                                                                                                                                                                             US-09-825-345-1/c
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APPLICANT: Wang, Xun
APPLICANT: Wang, Xun
APPLICANT: Zhu, Tong
TITLE OF INVENTION: SAME, AND METHODS OF USE
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
CURRENT APPLICATION NUMBER: US/09/938,842A
'RRENT FILING DATE: 2001-08-24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     269 TGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNTAAAGCTATGTTAGCAACCATGTGTGG 328
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US-09-880-107-2284
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Pred. No. 0.05;
0; Mismatches 90;
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47.9%; Pred. No. 0.57;
tive 0; Mismatches 99;
              CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/237,054
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: PatentIn Ver: 2.1
SOFTWARE: PatentIn Ver: 2.1
LENGTH: 13957
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-01-16
PRIOR PELLING NUMBER: US 60/300,111
PRIOR FILING DATE: 2001-06-22
NUMBER OF SEQ ID NOS: 5379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1992, Application US/09938842A Patent No. US20020160378A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                  lery Match 9.0%;
it Local Similarity 50.0%;
thes 90; Conservative
REFERENCE: 44921-5028-WO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 47.99
Matches 91; Conservative
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APPLICANT: Harper, Jeff
APPLICANT: Kreps, Joel
                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
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US-09-938-842A-1992/C
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LENGTH: 1173
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                                                                                                                                                                                                                                                  TYPE: DNA
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US-09-764-868-489/c
                                                                                                          RESULT 10
US-09-764-868-66/c
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LENGTH: 2734
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                                                                                                                                               Db 23957 CIGAACAGAAICTCCGTIICCGCTIIGIIAAIAAITIICCCICICCACTGTATTTTTTTTTCTAC 24016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      942 TICTIGGGTITCTITCACGCCCCCAAICCAAGAGCCAIAAACCIIAIGGTITGCCIGAAAA 883
                                                                                                                                                                                    69 TCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACAGCACGG 128
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                                                                        Gaps
                                                                                                              9 CAGAACAGCTTGCAAGTTACCGATTTGTACAGAAGCGATGCAACCTTCATCTTGTTGATA 68
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                                     DB 9; Length 80959;
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                                                                      57; Indels
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APPLICANT: Xu, H. Howard
TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION:
FILE REFERENCE: ELITRA.011A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10;
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Pred. No. 3.1;
0; Mismatches
                                   Score 30.8; D
Pred. No. 23;
0; Mismatches
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CURRENT FILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
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SOFTWARE: FastSEQ for Windows Version 4.0
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PRIOR APPLICATION NUMBER: 60/206,848
PRIOR PILING DATE: 2000-05-23
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-10-23
PRIOR APPLICATION NUMBER: 60/24,578
PRIOR FILING DATE: 2000-11-27
PRIOR FILING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/25,625
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PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILING DATE: 2001-02-16
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Zyskind, Judith W.
Wall, Daniel
Trawick, John D.
Carr, Grant J.
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                                   Query Match 7.4%;
Best Local Similarity 53.3%;
Matches 65; Conservative
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24077 AG 24078
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US-09-815-242-7522
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US-09-858-546-3
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Best Local &
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Patent No. US20020168711A1
GENERAL INFORMATION:
APPLICANT: ROSEN et al.
TITLE OF INVENTION:
Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PT232
CURRENT APPLICATION NUMBER: US/09/764,868
CURRENT APPLICATION NUMBER: US/09/764,868
CURRENT APPLICATION OF THE TOWN THING DATE: 2001-01-17
Prior application data removed - refer to PALM or file wrapper NUMBER OF SEQ ID NOS: 1510
SOFTWARE: Patentin Ver. 2.0
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                                                             APPLICANT: Rosen et al.

TILE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PIZZ.

CURRENT APPLICATION NUMBER: US/09/764,868

CURRENT FILING DATE: 2001-01-17

Prior application data removed - refer to PALM or file wrapp NUMBER OF SEQ ID NOS: 1510

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 66.
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Pred. No. 7.5;
0; Mismatches
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Pred. No. 6.1;
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; Sequence 66, Application US/09764868
; Patent No. US20020168711A1
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US-09-198-559-2/c
; Sequence 2, Application US/09198559
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53.08;
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Best Local Similarity 53.0%
Matches 62; Conservative
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Matches 62; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
CORGANISM: Homo sapiens
US-09-764-868-489
                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
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Gaps

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GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
                                                                                                                                                                NAME/KEY: misc_feature

CTHER INFORMATION: Incyte ID No. US20010051335A1 700344740H1

NAME/KEY: UNSURA:

LOCATION: 12-13, 30-31, 41, 43-44, 70, 79, 81, 105-106, 140, 153, 178, 192, 196,

CTHER INFORMATION: a, t, c, g, or other

US-09-294-093B-1641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      146 TATATCANGTTGCAGCGGACAGAGTCCATCNTCTATAAGCGGCTNAAANTGCCTCCTG 205
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Pred. No. 2.7;
0; Mismatches 54; Indels 0
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FILE CORRENT APPLICATION NUMBER: US/09/864,761

CURRENT APPLICATION NUMBER: US/09/864,761

CURRENT FILING DATE: 2001-05-23

PRIOR PELICATION NUMBER: US 60/180,312

PRIOR PELICATION NUMBER: US 60/207,456

PRIOR PELING DATE: 2000-05-26

PRIOR PELING DATE: 2000-06-26

PRIOR PELING DATE: 2000-06-36

PRIOR PELING DATE: 2000-10-04

PRIOR PELING DATE: 2000-10-04

PRIOR PELING DATE: 2000-09-27

PRIOR PELING DATE: 2001-01-30

PRIOR PELING DATE: 2001-01-30
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PRIOR APPLICATION NUMBER: PCT/USO1/00661
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION UNBER: PCT/USO1/00670
PRIOR FILING DATE: 2001-01-30
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APPLICATION NUMBER: US 60/234,687
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APPLICATION NUMBER: US 09/608,408
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Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                        Query Match 7.1%;
Best Local Similarity 51.8%;
Matches 58; Conservative
                                                                                    TYPE: DNA ORGANISM: Zea mays
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     SOFTWARE:
SEQ ID NO 1641
LENGTH: 307
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APPLICANT: Ito, Laura, Y.
APPLICANT: Sherman, Bradley, K.
TITLE OF INVENTION: POLYNUCLEOTIDES AND FOLYPEPTIDES DERIVED FROM CORN TASSEL
FILE REFERENCE: PL-0009 US
CURRENT APPLICATION NUMBER: US/09/294,093B
CURRENT FILING DATE: 1999-04-16
PRIOR PRILING DATE: April 21, 1998
NUMBER OF SEQ ID NOS: 6207
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 2964;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 2.0 URRENT APPLICATION DATA: APPLICATION NUMBER: US/09/198,559 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7.1%; Score 29.6; Di 53.0%; Pred. No. 7.9; tive 0; Mismatches
                                                                                                                                                                                                                13: Incyte Pharmaceuticals, Inc. 3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PF-0388 US
                GENERAL INFORMATION:
APPLICANT: Hillman, Jennifer L.
APPLICANT: Corley, Neil C.
APPLICANT: Shah, Purvi
TITLE OF INVENTION: RAS-LIKE PROTEIN
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/846,790
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Patent No. US20010051335A1
GENERAL INFORMATION:
APPLICANT: Lalgudi, Raghunath, V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lalgudi, Raghunath, V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTOREX AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-O
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                           1: Diskette
IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 2964 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 53.0 ies 62; Conservative
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: 650-855-05
TELEFAX: 650-845-4166
Patent No. US20020025930A1
                                                                                                                                                                                                                                                                                                                                       ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: Single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: COLNUTUIG
CLONE: 2791521
                                                                                                                                                                                                                                    STREET: 3174 Port CITY: Palo Alto STATE: CA COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
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US-09-198-559-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EXPRESSED IN HELIOO, SIGNAL = 2.4
EXPRESSED IN HEART, SIGNAL = 2.4
EXPRESSED IN ADULT LIVER, SIGNAL = 2.1
EXPRESSED IN FETAL LIVER, SIGNAL = 2.1
EXPRESSED IN BONE MARROW, SIGNAL = 1.2
EXPRESSED IN BONE MARROW, SIGNAL = 1.2
EXPRESSED IN PLACEWTA, SIGNAL = 2.5
EXPRESSED IN HELA, SIGNAL = 2.5
                                                 PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR PLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR PLING DATE: 2001-01-30
PRIOR PLING DATE: 2001-03-30
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2000-06-30
PRIOR PLING DATE: 2001-01-31
PRIOR PRIOR PLING DATE: 2001-01-31
PRIOR PRIOR DATE: 2001-01-31
PRIOR PRIOR PLING DATE: 2001-01-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 29.2; DE Pred. No. 3.4; 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM; Homo sapiens
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Best Local Similarity
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OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 4808
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CURRENT FILING DATE: 2001-05-23

PRIOR APPLICATION NUMBER: US 60/180,312

PRIOR FILING DATE: 2000-06-26

PRIOR FILING DATE: 2000-06-36

PRIOR FILING DATE: 2000-09-03

PRIOR FILING DATE: 2000-10-04

PRIOR FILING DATE: 2000-10-04

PRIOR FILING DATE: 2001-00-04

PRIOR FILING DATE: 2001-01-03

PRIOR FILING DATE: 2001-01-30

PRIOR FILING DATE: 2001-01-30
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N: EXPRESSED IN BRAIN, SIGNAL = 2.4
N: EXPRESSED IN HBARY, SIGNAL = 2.4
N: EXPRESSED IN HBARY, SIGNAL = 2.4
N: EXPRESSED IN ADULT LIVER, SIGNAL = 2.9
N: EXPRESSED IN FETAL LIVER, SIGNAL = 2.9
N: EXPRESSED IN DIG, SIGNAL = 2.7
N: EXPRESSED IN DAGENTA, SIGNAL = 2.5
N: EXPRESSED IN PLACENTA, SIGNAL = 2.5
N: EXPRESSED IN PLACENTA, SIGNAL = 2.5
N: EXPRESSED IN HELA, SIGNAL = 2.5
N: EXPRESSED IN HELA, SIGNAL = 2.5
N: EXTLANAN HIT: BE252309.1, EVALUE 2.10e-02
N: MIT: 9111526121, EVALUE 0.00e+00
N: WISSPROT HIT: P41143, EVALUE 6.00e-40
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                                                                                          NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 21546
LENGTH: 348
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Pred. No. 2.9;
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Patent No. US20020048763A1
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Best Local Similarity 48.7%;
Matches 76; Conservative
PRIOR FILING DATE: 2000-06-30 PRIOR APPLICATION NUMBER: US C PRIOR FILING DATE: 2001-01-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
PPLICANT: Rank, David R.
.PPLICANT: Hanzel, David K.
                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
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US-09-864-761-21546
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PLACENTA, SIGNAL = HELA, SIGNAL = 3.2

Title: Perfect score:

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BE500997 7434c05.x
AM495863 up44065.x
AL527400 AL527400
BE52374 Ay06910.x
AL538124 AL538124
BE779121 601464731
AM377912 601464731
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AM377909 Gr02d11.x
BG115265 602316195
BH33669 346749 MA
BJ3669 38 BJ665983
AL5306273 AL530627
BE950528 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-CE0-MAG1059 UT-M-BH3-BF72177 mab22d06.
 BQ42333 AGENCOURT
BQ651659 AGENCOURT
AL524324 AL524324
AL555818 AL555818
B1854884 603381829
BB654888 BB654888
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AW37933 MR0-HT024
BE48246 168310 BA
BG689246 337168 BA
AI574752 UI-R-GO-U
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BQ891601 AGENCOURT
AK003829 Mus muscu
AK019477 Mus muscu
BI546456 603188757
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BE650744 505 bp mRNA linear EST 06-SEP-2 UI-W-BH3-asr-h-05-0-UI.rl NIH_BWAP_M_S4 Mus musculus cDNA clone UI-W-BH3-asr-h-05-0-UI 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Chin, H
National Institute of Mental Health
6001 Executive Blvd. Room 7N-7190, MSC 9643, Bethesda, MD
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALIGNMENTS
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AW327909
BG115265
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BB640953
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BJ065983
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BE482496
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Tel: 301 443 1706
Fax: 301 443 9890
Emall: mEST@mail.nih.gov
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Bonaldo, M.F., Lenno
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AUTHORS
TITLE
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MEDLINE
COMMENT
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SOURCE
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BG865074 602784226
BB642867 BB642867
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BG700652 602682269
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                                                                                    (without alignments)
3381.206 Million cell updates/sec
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                                                                                                                            414
1 ctaacgtacagaacagcttg.....gttnggaaagcttgaccagt 414
                                                                      December 1, 2002, 16:14:38; Search time 1983 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description
                                                                                                                                                                                                                     32308132
         GenCore version 5.1.3
Copyright (c) 1993 - 2002 Compugen Ltd.
                                                                                                                                                                                                               . number of hits satisfying chosen parameters:
                                                                                                                                                                                            16154066 seqs, 8097743376 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                  - nucleic search, using sw model
                                                                                                                                                                                                                                                                                               summaries
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BG865074
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                                                                                                                                                             IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
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em_gss_fun: *
em_gss_mam: *
em_gss_nus: *
em_gss_other: *
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Maximum Match 100%
Listing first 45 su
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9b_est2:*
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9b_est4:*
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9b_gss:*
em_gss_hm:*
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Maximum DB seq length: 2000000000
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87.7
84.1
79.9
76.9
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EST 06-SEP-2000

Score

Result ę υ

382.4

363 348.2 330.8 328 318.4

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/clone="10" "NIH_BMAP_M_S4"
/clone="10" "NIH_BMAP_M_S4"
/dev_stage="27-32 days"
/dev_stage="27-32 days"
/dev_stage="27-32 days"
/dev_stage="27-32 days"
/dev_stage="27-32 days"
/dote="vector: pr773D-pac (Pharmacia) with a modified
polylinker; Site_1: Not 1; Site_2: Eco R1; The
NIH_BMAP_M_S4 library is a subtracted library of a series,
ultimately derived from a mixture of individually tagged
normalized libraries from ten regions of the mouse brain
(cerebellum, brain stems, olfactory bulbs, Mypothalmus,
cortex, amygdala, basal ganglia, pineal gland,
hipoccampus) after a series of subtractions to reduce the
representation of cDNAs from which ESTs had already been
generated in this process: NIH_BMAP_M_S4,
NIH_BMAP_M_S3.3, NIH_BMAP_M_S1.2, NIH_BMAP_M_S3.3, NIH_BMAP_M_S3.3, NIH_BMAP_M_S3.3, NIH_BMAP_M_S3.3, NIH_BMAP_M_S3.3, NIH_BMAP_M_S3.2, and
NIH_BMAP_M_S3.3, Lones from which 3 "ESTs had been derived
was used as a driver in a hybridization with a pool of
the NIH_BMAP_M_S3.3, NIH_BMAP_M_S3.2, and NIH_BMAP_M_S3.1
libraries in the form of single-stranded circles. The
remaining single-stranded circles (subtracted library)
was purified by hydroxyapatite column chromatography,
converted to double-stranded circles and electroporated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         into DH10B bacteria (LifeTechnologies) to generate the NIH_BWAP_M_S4 library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 ITGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    183 AACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTACTC 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243 AATTTCATGGTCGCCGCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATTTTC 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200 AAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATTTTC 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
availability will be considered under appropriate and ilmited collaborative arrangements
Seq primer: Mi3 Reverse.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 AACGTACAGAACAGCTIGCAAGTTACCGATTIGTACAGAAGCGAIGCAACCTTCATCTIG 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
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Pred. No. 1.8e
0; Mismatches
                                                                                                                       /organism="Mus musculus"
                                                                                                                                             /strain="C57BL/6J"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      128 g
                                                                                                                                           train="C57BL/6J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6:791-806, 1996)
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Best Local Simil
Matches 405; (
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3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT/T3 vector. RNA provided by Dr. Bertrand Jordan. Library went through two rounds of normalization, and was constructed by Bento Soares and M.Fallaa Bonaldo."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              : EST 23-DEC-1998 clone IMAGE:583405
                                                                                                                                                                                                                                                                              Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T., Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Thelsing, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ~
                                                                                                                                                                                             Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This clone was previously sequenced on the 5' end only, this new
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:358053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        163d07.x1 Soares_thymus_2NbMT Mus musculus cDNA clone IMAGE:56
similar to TR:Q13197 Q13197 DYSTROBREVIN-DELTA. [1];, mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Maria M/Mouse EST Project
Washu-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 517;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           data is from the 3' end
Possible reversed clone: similarity on wrong strand
High quality sequence stop: 463.
Location/Qualifiers
                      linear
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98.7%; Pred. No. 1.9e-101;
11ve 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xraf="taxon:10090"
/clone="IMAGE:583405"
/clone_lib="Soares_thymus_2NbMT"
                      mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .517
/organism="Mus musculus"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                        The WashU-HHMI Mouse EST Project Unpublished (1996)
                      517 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /tissue_type="Thymus"
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/lab_host="DH10B"
                                                                                                                            AI325959.1 GI:4060388
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                                          DEFINITION
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                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
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JOURNAL
COMMENT
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DEFINITION
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BB642867
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/strain="FvB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4910166"
/clone="IMAGE:4910166"
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/clone="IMAGE:4910166"
/clone="IMAGE:491016"
/clone="IMAGE:4910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. E. I (bassa 1 to 958)

S. NIH-MCC http://mgc.noi.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

L. Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Llocate.LAMI0810 row: d collumn: 07

High quality sequence stop: 734.
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AACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTACTC
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0; Mismatches 12
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 676)
Arakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Kawai, J., Konno, H., Kouda, M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Cokazaki, Y., Okido, T., Sakio, R., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagawa, A., Takakai, T., Sogabe, Y., Tanaka, T., Rikamatsu, M., and Hayashizaki, Y., Rikai, Mouse ESTS (Arakawa, T., et al. 2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BB642867 RIKEN full-length enriched, adult retina Mus musculus cDNA
Clone A930104E03 5', mRNA sequence.
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URL:http://genome.gsc.riken.go.jp,
Carninci.p., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh
Carninci.p., Shibata,Y., Hayatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
perpare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. . 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura
Hayashizaki,Y.
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Contact: YoshIhide Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
For Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
AATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGC - ANGTTGACCGTGTTTTCAGN
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/dev_stage="adult"
/lab_host="DHIDB"
/lab_host="DHIDB"
/lab_host="DHIDB"
/note="Site_1: SalI; Site_2: BamHI; cDNA library was
prepared and sequenced in Mouse Genome Encyclopedia
project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in
RIKEN. Division of Experimental Animal Research in: Riken
contributed to prepare mouse tissues. 1st strand cDNA was
GAGAGGAGGAGGACCATATTTTTTTTTTTVN 3'], cDNA was
Computational Analysis of Full-Length Mouse cDNAs Compared with Human Genome Sequences. Mamm. Genome. 12, 673-677 (2001) Please visit our web site (http://genome.gsc.riken.go.jp) for further details.
                                                                                              /organism="Mus musculus"
/db_xref="taxon:10090"
/clone="A331048203"
/clone_lib="RIKEN full-length enriched, adult retina"
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 461)
                                                                                                                                                                                                             NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                   Other_ESTs: up47e06.x1
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
MGI:1035654
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACA 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 461;
                                                                                                                                                                                                                                                                                                                                                                                                         Possible reversed clone: similarity on wrong strand
Seq primer: -40RP from Glbco.
Location/Qualifiers
1. .461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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Pred. No. 1.2e-90;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
                                                                           AW496140.1 GI:7066421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 79.2%;
Best Local Similarity 98.6%;
Matches 350; Conservative (
                                                                                                                                                                                                                                                     Tumor Gene Index
Unpublished (1997)
                                         mRNA sequence.
AW496140
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RESULT

EST 24-FEB-2000

linear

mRNA

461 bp

AW496140

us-09-680-959-125.rst

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880 bp mRNA linear EST 23-MAY-2002
AGENCOURT_7846069 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:6064183
5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procucement: ATCC/DCTD/DTP
Tissue Procucement: ATCC/DCTD/DTP
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM1338 row: h column: 08
High quality sequence stop: 714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /db_xref="taxon:yovc

/dlone_liPantriAdE:6064183"

/clone_lib="NIH_MGC_12"

/tissue_type="melanotic melanoma"

/lab_host="DH10B (phage-resistant)"

/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: NotI;

/note="Organ: skin; Vector: pCMV-SPORT6; Site_1: NotI;

Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
                                                                                                                                                                                                                                                                                                             Chordata; Craniata; Vertebrata; Euteleostomi;
Primates; Catarrhini; Hominidae; Homo.
       573 AAAGCTAIGTTAGCAACCAIGIGIGGIGGAAAAIGCIGGACAAAITGAGATAIGITIIC 632
                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleoston Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 880)
NIH-MGC http://mgc.nci.nih.gov/.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNT 302
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 183 AACAAGGGCCTTCCTTCTACTCACCAGATCAGGGGGGGGCAGTCCATCAGTCTCCTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 14; Length 880;
                                          363 TCCCAGATGTCAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT
                                                             1 others
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 318.4; DB 14;
Pred. No. 1.7e-87;
0; Mismatches 45;
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                                                                                                                                                                                                                                        BQ423333.1 GI:21118648
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88.6%;
                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
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Matches 365; Conservative
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TITLE
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                                                                                                                              RESULT 7
BQ423333
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Shift-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

L Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov
Tissue Procurement: miklos Palkovits, M.D., Ph.D.

CDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov. t column: 17

High quality sequence stop: 761.

Location/Qualifiers

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                                                                                                                                                                Vertebrata; Euteleostomi;
                BG700652 791 bp mRNA linear EST 07-WAY-602682269F1 NIH_MGC_95 Homo saplens cDNA clone IMAGE:4815064 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     275 AACTTACAGAACAGCCTGCAAATTA-CGATTTGTACAAAAACGATGCAACCTTCATCTTG 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63 TIGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCTATCTACTATCAGTTG 182
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note="Organ: brain; Vector: pBluescriptR (modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACAAGCGCCTTCCTTCTACTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTACTC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 791;
                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, E
Mammalia, Eutheria, Primates, Catarrhini, Hominidae,
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Pred. No. 1.6e-87,
0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /tissue_type="hippocampus"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
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                                                                                   BG700652.1 GI:13970209
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88.68;
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                                                     mRNA sequence.
BG700652
                                                                                                                                           Homo sapiens
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Gaps

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AATTTCATGGTCGCCGTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNT
                                                                                                    /tissue_type="neuroblastoma cells"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:9606"
/clone="CSODCO06YE12"
/clone_lib="LTI_NFL003_NBC3"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .967
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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/note="Organ: liver; Vector: pOTB7; Site_1: XhoI; Site_2:
/note="Organ: liver; Vector: poTB7; Site_1: XhoI; Californally cloned
into EcoRI/XhoI sites selected >500bp for average insert size
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E 1 (bases 1 to 932)

S NIH-MGC http://mgc.nci.nih.gov/.

I Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov
Tissue Procurement: CGAP (Stanford)

CDNA Library Preparation: Rubin Laboratory

CDNA Library Preparation: Rubin Laboratory

CDNA Library Preparation: Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://mage.llnl.gov

Plate: LLCM2139 rown: p column: 07

High quality sequence stop; 733.
                                                                                                                                                                                                                                     AGENCOURT_8342332 NIH_MGC_100 Homo sapiens cDNA clone IMAGE:6268278 5', mRNA sequence.
BQ651659
BQ651659.1 GI:21775831
EST.
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     298 AACTTACAGAACAGCCTGCAAATTA-CGATTTGTACAAAAACGATGCAACCTTCATCTTG 356
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//nce="Organ: brain: Vector: pcMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and coloned into the Not I and Eco RV sites of the pcMVSPORT 6 vector. Library was normalized. Library was constructed by Life Technologies. Contact: Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville, Maryland 20850, USA Fax: (1) 301 610 8371 Email: filang@lifetech.com URL: http://fullength.invitrogen.com" 5 others
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AL524324
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Li, W.B., Gruber, C., Jessee, J. and Polayes, D.
Unil.-Length CDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRX codex - France
BP 191 91006 EVRX codex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
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303 AAAGCTATGTTAGCAACCATGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATTTTC
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/db_xref="taxon:9606"
/clone="csoRo(002K0200"
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/clone="taxon:9606"
/clone="taxon:pea="placenta"
/note="vector: pcwNsporr 6; Site_1: Not!; lst strand cDNA was primed with a Not!-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and cloned into the Not I and Eco RV sites of the pcMvSpoRr 6 vector. Library was normalized. Library was constructed by Life Technologies. Contact: Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville, Maryland 20850, USA Fax: (1) 301 610 8371
Email: fliang@lifetech.com URL: http://cullength.invitrogen.com"
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1 (bases 1 to 896)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full.length cDNA libraries and normalization
Unpublished (2001)
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AATTTCATGGTCGCCGCCTACGACAGTGAGGGCCGAGGCANGTTGACCGTGTTTTCAGNT
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Genoscope - Centre National de Sequencage
BP 191 91006 EWRY cedex - France
Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
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Pred. No. 2.3e-87;
1; Mismatches 45;
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AL555818
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603381829F1 NCI_CGAP_Mam6 Mus musculus CDNA clone IMAGE:5387622 5',
mRNA sequence.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
1 (bases 1 to 845)
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Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11987 row: j column: 07
High quality sequence stop: 800.
Location/Qualifiers
1. .845
NIH-WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
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                                                                                                                                                                                                                                                                                                                 619 TCCCAGATGTCAGATTCCAATGCTTAATGATATTTAGCAAGTTTGACCAGT 670
                                                                                                                                                                                                                                                                                     TCCCAGATGTCAGATTCCAATGGCTTAATGATGTTNGGAAAGCTTGACCAGT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone="IMAGE:5387622"
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/sex="female, virgin"
/tissue_type="infiltrating ductal carcinoma"
/dev_stage="5 months"
/lab_host="DH108"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref-"taxon:10090"
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URL:http://genome-resegac.riken.go.jp,
Carninci,P., Shibata,Y., Hayatsu,M., Sugahara,Y., Shibata,K., Itch
,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. . 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,K., Tanaka,T., Matsuura
,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
Hayashizaki,Y.
RIKEN integrated sequence analysis (RISA) system--384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res.
10 (11), 1757-1771 (2000)
Konno,H., Pukunishi,Y., Shibata,K., Itch,M., Carninci,P., Sugahara
,Y. and Hayashizaki,Y.
Computer-based methods for the mouse full-length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Murinae; Mus.
1 (bases I to 647)
Arakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Kawai, J., Konno, H., Kouda, M., Koya, S., Matesuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Okazaki, Y., Okido, T., Salto, M., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Muramatsu, M. and Hayashizaki, Y.
Muramatsu, M. and Hayashizaki, Y.
Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BB654888 RIKEN full-length enriched, 9 days embryo Mus musculus cDNA clone D030074022 5', mRNA sequence.
BB654888 I GI:16488716
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Yoshihide Hayashizaki
Laboratorry for Genome Exploration Research Group, RIKEN Genomic
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
T-72 Suchiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-922
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  CCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTGAACAAGCGCCTTCCTA 119
                                                                                                                                                               ACGACAGTGAGGCCCGAGGCANGTTGACCGTGTTTTCAGNTAAAGCTATGTTAGCAACCA
                                                                                                                                                                                                                 180 ACGACAGTGAGGGCCGAGGCAAGTTGACCGTGTTTTCAGTTAAAGCTATGTTAGCAACCA
                                                                                   120 CTCACCAGATCAGGGTGGAGCAGTCCATCAGTCTCCTACTAGATTTCATGGTCGCCGCCT
                                                                                                                                                                                                                                                                         TGTGTGGTGGAAAAATGCTGGACAAATTGAGATACATTTTCTCCCAGATGTCAGATTCCA
                                                          CTCACCAGATCAGCGTGGAGCAGTCCATCAGTCTCCTACTCCAATTTCATGGTCGCCGCCT
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KEYWORDS
SOURCE
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Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 590)
Rargul,G.J., Dudekula,D.B., Qian,Y., Lim,M.K., Jaradat,S.A., Tanaka,T.S., Carter,M.G. and Ko,M.S.H.
                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                      BG078688 590 bp mRNA 11near EST 26-JAN-2001
H3030607-5 NIA Mouse 15K cDNA Clone Set Mus musculus cDNA clone
H3030G07 5', mRNA sequence.
                                                                                  /clone_1bb_RIKEN full-length enriched, 9 days embryo"
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/lab_host="9HIS"
/note="Site_1: Sall; Site_2: BamHI; cDNA library was
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project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in
RIKEN. Division of Experimental Animal Research in Riken
contributed to prepare mouse tissues. 1st strand cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGATATCTGGAATATGATCGAAGCTTTCCGAGACAATGGCCTTAACACGCTGGACCACA 122
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Best Local Similarity 98.2%; Pred. No. 2.1e-85;
Matches 334; Conservative 0; Mismatches 4
                                            /organism="Mus musculus"
                                                                   /db_xref-"taxon:10090"
Location/Qualifiers
1. .647
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20-DEC-2001

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/organism="Mus musculus"
/organism="Mus musculus"
/db xref="taxon:10090"
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/tissue_1rype="neural retina"
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/dev_stage="embryonic day 14.5 post-fertilization"
/note="Vector: pAMP10 (Gibco): Cloned unidizectionally.
Primer: Oligo dT. RNA Isolation: cytoplasmic RNA preps
(Manniatis): Cloning Technique: CUA Cloning (CloneAmp,
Life Technologies): Average insert is Rs. Rb;
Insertion site: TAGGTCCAPATTGTGASIC:->. Other
information regarding entire library may be found at
http://pga.swmed.edu/Data/Libraries/microarray_cdna_librar
les.htm.
                                                                                                          BG805399 600 bp mRNA linear EST 20-DEC-2001
0692-19 Mouse E14.5 retina lambda ZAP II Library Mus musculus cDNA,
                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                    Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 600)
Mu,X., Zhao,S., Pershad,R., Hsieh,T.-F., Scarpa,A., Wang,S.W., White,R.A., Beremand,P.D., Thomas,T.L., Gan,L. and Klein,W.H. Gene expression in the developing mouse retina by EST sequencing and microarray analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCACGGAGATCAGGCGTGTNCCGCCTGGAGACCGTCATCTCGTCCATCTACTATCAGTTG 182
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Department of Biochemistry and Molecular Biology
University of Texas M.D. Anderson Cancer Center
Box 117, 1515 Holcombe Blvd., Houston, TX 77030, USA
Tel: 713 792 3646
Fax: 713 790 0329.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 303; DB 12;
Pred. No. 8.1e-83;
0; Mismatches 3;
                                                                                                                                                                                                                                                 Mus musculus
Eukaryota, Metazoa, Chordata, Craniata,
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                300 GATGTTTGGAAAGCTTGACCAGT 322
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Best Local S
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                                                                                                                                                 Please
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                )-Not primers. References include: (1) Genome wide expression profiling of mid-gestation placenta and embryo using a 15,000 mouse developmental CDNA microarray, 2000, Proc. Natl. Acad. Sci. U S A, 97: 9127-9132; (2) Large-scale CDNA analysis reveals phased gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7.5-day mouse embryos reveals enrichment in the t-complex and under-representation on the X chromosome, 1998, Hum Mol Genet 7: 1967-1978."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             patterns during preimplantation mouse develolpment, 2000, Development, 127: 1737-1749; (3) Genome-wide mapping of unselected transcripts from extraembryonic tissue of
                                                                                                                                                                                                                                                                            1. .590
/organism="Mus musculus"
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/clone="H3030G07"
/clone_H3030G07"
/clone_H3030G07"
/clone_Sarrayed from a variety of cDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         National Institute on Aging/National Institutes of Health. 333 Cassell Drive, Suite 4000, Baltimore, MD 21224-6820, USA Email: cdnaedigsun.grc.nia.nih.gov
This clone set has been freely distributed to the community. Is the set has been freely distributed to the community. Plate: H3030 row: G column: 07 Seq primer: -21M13 Reverse High quality sequence stop: 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    212 CAGCGTĠGAGCAGTCCATCAGTCTCCTACTCAATTTCATGGTCGCCGCCTACGACAGTGA 271
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                                                                                                                                                                                                                                                           Location/Qualifiers
  Unpublished (2001)
Other_ESTs: H3030G07-3
Contact: George J. Kargul
Laboratory of Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /lab_host="DH10B"
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t Local Similarity 98.5%;
....ches 318; Conservative (
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Gaps

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302

us-09-680-959-125.rst

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/tissue_type="adenocarctinoma cell line"
/lab_host="DH10B (phage=resistant,"
/note="Ordin: colon, Vector: porB7; Site_1: XhoI; Site_2:
FooR; CDNA made by oligo-dr priming. Directionally
cloned into EcoRIXAhoI sites using the following 5,
adaptor: GGCACGAG(G). Size=reslected >500pp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)"
13 a 207 c 221 g 189 t.
                                         BG469017 830 bp mRNA linear EST 21-MAR-2001
602510757F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:4644783 5',
                                                                                                                                                                                                                            Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 830)
NIH-MGC http://mgc.noi.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                 CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: NIH Intramural Sequencing Center
Clone distribution: MGC Clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
Phttp://mage.lnh.gov
Plate: LLCM1417 row: b column: 16
High quality sequence stop: 646.
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                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Emall: cgapbs-remail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
/clone="IMAGE:4644783"
                                                                                         mRNA sequence.
BG469017
BG469017.1 GI:13401202
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Search completed: December 1, 2002, 17:42:10 Job time : 1989 secs